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--File: wmanagerdefs.mesa
--Edited by Sandman          October 7, 1977  9:15 AM

DIRECTORY
  MenuDefs: FROM "menudefs",
  KeyDefs: FROM "keydefs",
  StreamDefs: FROM "streamdefs",
  RectangleDefs: FROM "rectangledefs",
  WindowDefs: FROM "windowdefs";

DEFINITIONS FROM MenuDefs, StreamDefs, RectangleDefs, WindowDefs;

WManagerDefs: DEFINITIONS =
BEGIN

-- some TYPE'S and POINTERS

  WMDataHandle: TYPE = POINTER TO WMDataObject;
  AMouseButton: TYPE = KeyDefs.MouseButton;
  KeySet: TYPE = [0..37B];
  ButtonProc: PUBLIC TYPE = PROCEDURE[WindowHandle, xCoord, yCoord];
  ProcArray: PUBLIC TYPE = ARRAY AMouseButton OF ButtonProc;
  CursorType: TYPE = {textpointer, arrow, bullseye, leftbutton,
                      uparrow, downarrow, botharrow, hourglass, norm};

-- programs implementing the WindowManager

  WManPosition: PROGRAM [WMState: WMDataHandle];
  WManSelection: PROGRAM [WMState: WMDataHandle];
  WManWindows: PROGRAM [WMState: WMDataHandle];
  WManControl: PROGRAM; -- Control Module
  Double: PROGRAM;
  -- procedures implementing the WindowManager

- GetMouseButton: PROCEDURE RETURNS[AMouseButton];
  GetKeySet: PROCEDURE RETURNS[KeySet];
  CursorToRectangleCoords: PROCEDURE [Rptr, xCoord, yCoord]
    RETURNS[xCoord, yCoord];
  SetCursor: PROCEDURE [CursorType];
  SetJumpStripe: PROCEDURE [WindowHandle, BOOLEAN];
  NullProc: PROCEDURE [WindowHandle, xCoord, yCoord];
  NoteNameError: PROCEDURE [WindowHandle, STRING];
  WriteMessageString: PROCEDURE [WindowHandle, STRING];
  AssignScratchFile: PROCEDURE RETURNS[STRING, INTEGER];
  LoadWindow: PROCEDURE [w: WindowHandle, x: xCoord, y: yCoord];
  GrowWindow: PROCEDURE [w: WindowHandle, x: xCoord, y: yCoord];
  MoveWindow: PROCEDURE [w: WindowHandle, x: xCoord, y: yCoord];
  DestroyWindow: PROCEDURE [w: WindowHandle, x: xCoord, y: yCoord];
  CreateWindow: PROCEDURE [w: WindowHandle, x: xCoord, y: yCoord];
  PutSelect: PROCEDURE [w: WindowHandle, x: xCoord, y: yCoord];
  WordSelect: PROCEDURE [w: WindowHandle, x: xCoord, y: yCoord];
  TextSelect: PROCEDURE [w: WindowHandle, x: xCoord, y: yCoord];
  MenuSelect: PROCEDURE [w: WindowHandle, x: xCoord, y: yCoord];
  Positionfile: PROCEDURE [w: WindowHandle, x: xCoord, y: yCoord];
  ScrollUpFile: PROCEDURE [w: WindowHandle, x: xCoord, y: yCoord];
  ScrollDownFile: PROCEDURE [w: WindowHandle, x: xCoord, y: yCoord];
  NormalizeSelection: PROCEDURE [w: WindowHandle, x: xCoord, y: yCoord];
  CursorXAdjust: PROCEDURE RETURNS[INTEGER] ;

-- constants
  maxlines: INTEGER = 50;
  JumpStrip: INTEGER = leftmargin;
  slop: INTEGER = 10;
  maxscratch: INTEGER = 4;
  commands: !INTEGER = 8;

-- magic memory locations and contents
  DCBchainLead: DCBptr = LOOPHOLE[420B];
  xmouseloc: POINTER = LOOPHOLE[424B];
  ymouseloc: POINTER = LOOPHOLE[425B];
  xcursorloc: POINTER = LOOPHOLE[426B];
  ycursorloc: POINTER = LOOPHOLE[427B];
  buttonsloc: POINTER = LOOPHOLE[177030B];
  cursormap: POINTER = LOOPHOLE[431B];

--WMANAGER RECORD
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WMDataObject: TYPE = RECORD [
  scratchfiles: ARRAY [0..maxscratch) OF DiskHandle,
  windows: ARRAY [0..4) OF WindowHandle,
  menuarray: ARRAY [0..commands) OF MenuItem,
  defaultfont: FAPtr,
  defaultlineheight: INTEGER,
  defaulttks: StreamHandle,
  defaultmapdata: BMHandle,
  nullindex: StreamIndex,
  originindex: StreamIndex,
  useKeyset: BOOLEAN,
  currentcursor: CursorType,
  TextProcArray: ProcArray,
  ScrollProcArray: ProcArray,
  ButtonProcArray: ProcArray];
```

END. of wmanagerdefs